



Please type a plus sign (+) inside this box →

12-10-01

PTO/SB/05 (03-01)

Applicable for use through 10/31/2002. OMB 0651-0032  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 C.F.R. 1.53(b))

Attorney Docket No. 2183-5006.1US

First Inventor Havenga et al.

Title GENE DELIVERY VECTORS WITH CELL TYPE SPECIFICITY FOR  
MESENCHYMAL STEM CELLS

Express Mail Label No. EL 740547505 US

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

- Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
- Applicant claims small entity status.  
See 37 CFR 1.27.
- Specification [Total Pages 39]  
(preferred arrangement set forth below)
  - Descriptive title of the Invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
- Drawing(s) (35 U.S.C. 113) [Total Sheets 3]
- Oath or Declaration [Total Pages ]  
  - a.  Newly executed (original or copy)
  - b.  Copy from a prior application (37 CFR 1.63 (d))  
(for a continuation/divisional with Box 18 completed)
  - i.  **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
- Application Data Sheet. See 37 CFR 1.76

TO  
Assistant Commissioner for Patents  
Box Patent Application  
Washington, DC 20231

7.  CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
  - a.  Computer Readable Form (CRF)
  - b. Specification Sequence Listing on:
    - i.  CD-ROM or CD-R (2 copies); or
    - ii.  paper
  - c.  Statements verifying identity of above copies

## ACCOMPANYING APPLICATIONS PARTS

9.  Assignment Papers (cover sheet & document(s))
10.  37 C.F.R. §3.73(b) Statement  Power of Attorney (when there is an assignee)
11.  English Translation Document (if applicable)
12.  Information Disclosure Statement (IDS)/PTO-1449  Copies of IDS Citations
13.  Preliminary Amendment
14.  Return Receipt Postcard (MPEP 503) (Should be specifically itemized)
15.  Certified Copy of Priority Document(s) (if foreign priority is claimed)
16.  Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17.  Other: \_\_\_\_\_

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

Continuation  Divisional  Continuation-in-part (CIP)

of prior application No: \_\_\_\_\_ / \_\_\_\_\_

Prior application information: Examiner \_\_\_\_\_

Group / Art Unit: \_\_\_\_\_

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 17. CORRESPONDENCE ADDRESS

Customer Number or Bar Code Label



or  Correspondence address below

(Insert Customer Number or Bar Code Label here)

24247

PATENT TRADEMARK OFFICE

Name

Address

City

Country

State

Zip Code

Telephone

Fax

Name (Print/Type)	Allen C. Turner	Registration No. (Attorney/Agent)	33,041
Signature		Date	November 13, 2001

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# FEE TRANSMITTAL for FY 2002

Patent fees are subject to annual revision.

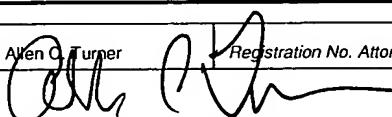
TOTAL AMOUNT OF PAYMENT

(\$ 613)

Complete if Known	
Application Number	Not Yet Assigned
Filing Date	November 13, 2001
First Named Inventor	Havenga et al.
Examiner Name	Unknown
Group / Art Unit	Unknown

Attorney Docket No. 2183-5006.1US

METHOD OF PAYMENT (check one)					FEE CALCULATION (continued)																																																																																																																																																																																																						
<p>1. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:</p> <p>Deposit Account Number 20-1469</p> <p>Deposit Account Name TraskBritt</p> <p><input checked="" type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17</p> <p><input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27</p>					<p>3. ADDITIONAL FEES</p> <table border="1"> <thead> <tr> <th>Fee Code</th> <th>Large Entity Fee (\$)</th> <th>Fee Code</th> <th>Small Entity Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>105</td><td>130</td><td>205</td><td>65</td><td>Surcharge - late filing fee or oath</td><td></td></tr> <tr><td>127</td><td>50</td><td>227</td><td>25</td><td>Surcharge - late provisional filing fee or cover sheet</td><td></td></tr> <tr><td>139</td><td>130</td><td>139</td><td>130</td><td>Non-English specification</td><td></td></tr> <tr><td>147</td><td>2,520</td><td>147</td><td>2,520</td><td>For filing a request for reexamination</td><td></td></tr> <tr><td>112</td><td>920*</td><td>112</td><td>920*</td><td>Requesting publication of SIR prior to Examiner action</td><td></td></tr> <tr><td>113</td><td>1,840*</td><td>113</td><td>1,840*</td><td>Requesting publication of SIR after Examiner action</td><td></td></tr> <tr><td>115</td><td>110</td><td>215</td><td>55</td><td>Extension for reply within first month</td><td></td></tr> <tr><td>116</td><td>400</td><td>216</td><td>200</td><td>Extension for reply within second month</td><td></td></tr> <tr><td>117</td><td>920</td><td>217</td><td>460</td><td>Extension for reply within third month</td><td></td></tr> <tr><td>118</td><td>1,440</td><td>218</td><td>720</td><td>Extension for reply within fourth month</td><td></td></tr> <tr><td>128</td><td>1,960</td><td>228</td><td>980</td><td>Extension for reply within fifth month</td><td></td></tr> <tr><td>119</td><td>320</td><td>219</td><td>160</td><td>Notice of Appeal</td><td></td></tr> <tr><td>120</td><td>320</td><td>220</td><td>160</td><td>Filing a brief in support of an appeal</td><td></td></tr> <tr><td>121</td><td>280</td><td>221</td><td>140</td><td>Request for oral hearing</td><td></td></tr> <tr><td>138</td><td>1,510</td><td>138</td><td>1,510</td><td>Petition to institute a public use proceeding</td><td></td></tr> <tr><td>140</td><td>110</td><td>240</td><td>55</td><td>Petition to revive - unavoidable</td><td></td></tr> <tr><td>141</td><td>1,280</td><td>241</td><td>640</td><td>Petition to revive - unintentional</td><td></td></tr> <tr><td>142</td><td>1,280</td><td>242</td><td>640</td><td>Utility issue fee (or reissue)</td><td></td></tr> <tr><td>143</td><td>460</td><td>243</td><td>230</td><td>Design issue fee</td><td></td></tr> <tr><td>144</td><td>620</td><td>244</td><td>310</td><td>Plant issue fee</td><td></td></tr> <tr><td>122</td><td>130</td><td>122</td><td>130</td><td>Petitions to the Commissioner</td><td></td></tr> <tr><td>123</td><td>50</td><td>123</td><td>50</td><td>Processing fee under 37 CFR 1.17 (q)</td><td></td></tr> <tr><td>126</td><td>180</td><td>126</td><td>180</td><td>Submission of Information Disclosure Stmt</td><td></td></tr> <tr><td>581</td><td>40</td><td>581</td><td>40</td><td>Recording each patent assignment per property (times number of properties)</td><td></td></tr> <tr><td>146</td><td>740</td><td>246</td><td>370</td><td>Filing a submission after final rejection (37 CFR § 1.129(a))</td><td></td></tr> <tr><td>149</td><td>740</td><td>249</td><td>370</td><td>For each additional invention to be examined (37 CFR § 1.129(b))</td><td></td></tr> <tr><td>179</td><td>740</td><td>279</td><td>370</td><td>Request for Continued Examination (RCE)</td><td></td></tr> <tr><td>169</td><td>900</td><td>169</td><td>900</td><td>Request for expedited examination of a design application</td><td></td></tr> <tr> <td colspan="5">Other fee (specify) _____</td> <td colspan="5">SUBTOTAL (3) (\$ 0)</td> </tr> <tr> <td colspan="5">*Reduced by Basic Filing Fee Paid</td> <td colspan="5">SUBTOTAL (3) (\$ 0)</td> </tr> </tbody> </table>					Fee Code	Large Entity Fee (\$)	Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid	105	130	205	65	Surcharge - late filing fee or oath		127	50	227	25	Surcharge - late provisional filing fee or cover sheet		139	130	139	130	Non-English specification		147	2,520	147	2,520	For filing a request for reexamination		112	920*	112	920*	Requesting publication of SIR prior to Examiner action		113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action		115	110	215	55	Extension for reply within first month		116	400	216	200	Extension for reply within second month		117	920	217	460	Extension for reply within third month		118	1,440	218	720	Extension for reply within fourth month		128	1,960	228	980	Extension for reply within fifth month		119	320	219	160	Notice of Appeal		120	320	220	160	Filing a brief in support of an appeal		121	280	221	140	Request for oral hearing		138	1,510	138	1,510	Petition to institute a public use proceeding		140	110	240	55	Petition to revive - unavoidable		141	1,280	241	640	Petition to revive - unintentional		142	1,280	242	640	Utility issue fee (or reissue)		143	460	243	230	Design issue fee		144	620	244	310	Plant issue fee		122	130	122	130	Petitions to the Commissioner		123	50	123	50	Processing fee under 37 CFR 1.17 (q)		126	180	126	180	Submission of Information Disclosure Stmt		581	40	581	40	Recording each patent assignment per property (times number of properties)		146	740	246	370	Filing a submission after final rejection (37 CFR § 1.129(a))		149	740	249	370	For each additional invention to be examined (37 CFR § 1.129(b))		179	740	279	370	Request for Continued Examination (RCE)		169	900	169	900	Request for expedited examination of a design application		Other fee (specify) _____					SUBTOTAL (3) (\$ 0)					*Reduced by Basic Filing Fee Paid					SUBTOTAL (3) (\$ 0)				
Fee Code	Large Entity Fee (\$)	Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid																																																																																																																																																																																																						
105	130	205	65	Surcharge - late filing fee or oath																																																																																																																																																																																																							
127	50	227	25	Surcharge - late provisional filing fee or cover sheet																																																																																																																																																																																																							
139	130	139	130	Non-English specification																																																																																																																																																																																																							
147	2,520	147	2,520	For filing a request for reexamination																																																																																																																																																																																																							
112	920*	112	920*	Requesting publication of SIR prior to Examiner action																																																																																																																																																																																																							
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action																																																																																																																																																																																																							
115	110	215	55	Extension for reply within first month																																																																																																																																																																																																							
116	400	216	200	Extension for reply within second month																																																																																																																																																																																																							
117	920	217	460	Extension for reply within third month																																																																																																																																																																																																							
118	1,440	218	720	Extension for reply within fourth month																																																																																																																																																																																																							
128	1,960	228	980	Extension for reply within fifth month																																																																																																																																																																																																							
119	320	219	160	Notice of Appeal																																																																																																																																																																																																							
120	320	220	160	Filing a brief in support of an appeal																																																																																																																																																																																																							
121	280	221	140	Request for oral hearing																																																																																																																																																																																																							
138	1,510	138	1,510	Petition to institute a public use proceeding																																																																																																																																																																																																							
140	110	240	55	Petition to revive - unavoidable																																																																																																																																																																																																							
141	1,280	241	640	Petition to revive - unintentional																																																																																																																																																																																																							
142	1,280	242	640	Utility issue fee (or reissue)																																																																																																																																																																																																							
143	460	243	230	Design issue fee																																																																																																																																																																																																							
144	620	244	310	Plant issue fee																																																																																																																																																																																																							
122	130	122	130	Petitions to the Commissioner																																																																																																																																																																																																							
123	50	123	50	Processing fee under 37 CFR 1.17 (q)																																																																																																																																																																																																							
126	180	126	180	Submission of Information Disclosure Stmt																																																																																																																																																																																																							
581	40	581	40	Recording each patent assignment per property (times number of properties)																																																																																																																																																																																																							
146	740	246	370	Filing a submission after final rejection (37 CFR § 1.129(a))																																																																																																																																																																																																							
149	740	249	370	For each additional invention to be examined (37 CFR § 1.129(b))																																																																																																																																																																																																							
179	740	279	370	Request for Continued Examination (RCE)																																																																																																																																																																																																							
169	900	169	900	Request for expedited examination of a design application																																																																																																																																																																																																							
Other fee (specify) _____					SUBTOTAL (3) (\$ 0)																																																																																																																																																																																																						
*Reduced by Basic Filing Fee Paid					SUBTOTAL (3) (\$ 0)																																																																																																																																																																																																						
<p>2. Payment Enclosed:</p> <p><input checked="" type="checkbox"/> Check <input type="checkbox"/> Credit card <input type="checkbox"/> Money Order <input type="checkbox"/> Other</p>																																																																																																																																																																																																											
FEE CALCULATION																																																																																																																																																																																																											
<p>1. BASIC FILING FEE</p> <table border="1"> <thead> <tr> <th>Large Entity Fee Code</th> <th>Fee (\$)</th> <th>Small Entity Fee Code</th> <th>Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>101</td><td>740</td><td>201</td><td>370</td><td>Utility filing fee</td><td>370</td></tr> <tr><td>106</td><td>330</td><td>206</td><td>165</td><td>Design filing fee</td><td></td></tr> <tr><td>107</td><td>510</td><td>207</td><td>255</td><td>Plant filing fee</td><td></td></tr> <tr><td>108</td><td>740</td><td>208</td><td>370</td><td>Reissue filing fee</td><td></td></tr> <tr><td>114</td><td>160</td><td>214</td><td>80</td><td>Provisional filing fee</td><td></td></tr> <tr> <td colspan="5">SUBTOTAL (1) (\$ 370)</td> <td></td> </tr> </tbody> </table>										Large Entity Fee Code	Fee (\$)	Small Entity Fee Code	Fee (\$)	Fee Description	Fee Paid	101	740	201	370	Utility filing fee	370	106	330	206	165	Design filing fee		107	510	207	255	Plant filing fee		108	740	208	370	Reissue filing fee		114	160	214	80	Provisional filing fee		SUBTOTAL (1) (\$ 370)																																																																																																																																																													
Large Entity Fee Code	Fee (\$)	Small Entity Fee Code	Fee (\$)	Fee Description	Fee Paid																																																																																																																																																																																																						
101	740	201	370	Utility filing fee	370																																																																																																																																																																																																						
106	330	206	165	Design filing fee																																																																																																																																																																																																							
107	510	207	255	Plant filing fee																																																																																																																																																																																																							
108	740	208	370	Reissue filing fee																																																																																																																																																																																																							
114	160	214	80	Provisional filing fee																																																																																																																																																																																																							
SUBTOTAL (1) (\$ 370)																																																																																																																																																																																																											
<p>2. EXTRA CLAIM FEES</p> <table border="1"> <thead> <tr> <th>Total Claims</th> <th>Extra Claims</th> <th>Fee from below</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>47</td><td>-20 **</td><td>= 27</td><td>X 9 = 243</td></tr> <tr><td>Independent Claims</td><td>1</td><td>-3 **</td><td>= 0</td></tr> <tr><td>Multiple Dependent</td><td></td><td></td><td>X = 0</td></tr> <tr> <td colspan="5">SUBTOTAL (2) (\$ 243)</td> </tr> </tbody> </table>										Total Claims	Extra Claims	Fee from below	Fee Paid	47	-20 **	= 27	X 9 = 243	Independent Claims	1	-3 **	= 0	Multiple Dependent			X = 0	SUBTOTAL (2) (\$ 243)																																																																																																																																																																																	
Total Claims	Extra Claims	Fee from below	Fee Paid																																																																																																																																																																																																								
47	-20 **	= 27	X 9 = 243																																																																																																																																																																																																								
Independent Claims	1	-3 **	= 0																																																																																																																																																																																																								
Multiple Dependent			X = 0																																																																																																																																																																																																								
SUBTOTAL (2) (\$ 243)																																																																																																																																																																																																											
<p>** or number previously paid, if greater; For Reissues, see above</p>																																																																																																																																																																																																											

SUBMITTED BY					Complete (if applicable)	
Name (Print/Type)	Allen C. Turner	Registration No. Attorney/Agent)	33,041	Telephone	801-532-1922	
Signature				Date	November 13, 2001	

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

**PATENT**  
**5006.1US**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**In re Application of:**

Havenga et al.

**Serial No.:** To be assigned

**Filed:** 13 November 2001

**For:** GENE DELIVERY VECTORS WITH  
CELL TYPE SPECIFICITY FOR  
MESENCHYMAL STEM CELLS

**Examiner:** To be assigned

**Group Art Unit:** To be assigned

**Attorney Docket No.:** 5006.1US

**NOTICE OF EXPRESS MAILING**

Express Mail Mailing Label  
Number: EL740547505US

Date of Deposit with USPS: November 13, 2001

Person making Deposit: Orlena Howell

**Statement under 37 C.F.R. § 1.821(f)**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

I, Shawn G. Hansen, an attorney registered to practice before the United States Patent & Trademark Office and attorney of record for this application, state that:

1. The enclosed paper copy of the SEQUENCE LISTING, as well as the enclosed copy of the SEQUENCE LISTING in computer readable form (CRF), are in compliance with the requirements of 37 C.F.R. §§ 1.821 through 1.825.

2. The enclosed copy of the SEQUENCE LISTING in computer readable form (CRF) is believed to be identical to the paper copy of the SEQUENCE LISTING.

3. The enclosed paper copy of the SEQUENCE LISTING contains no new matter.

Respectfully submitted,



Shawn G. Hansen  
Registration No. 42,627  
Attorney for Applicants  
TRASK BRITT, PC  
P. O. Box 2550  
Salt Lake City, Utah 84110  
Telephone: (801) 532-1922

Date: 12 November 2001

N:\2183\5006.1\Sequence listing statement.wpd